

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendments, claims 1-12 are pending in the application, with claims 1 being the only independent claim. New claims 9-12 are sought to be added. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Support for the foregoing amendments to independent claim 1 appear, for example, in page 5, lines 12-18 and page 13, lines 11-36, of the specification as filed. Support for new dependent claim 9 appears in original claim 1. Support for new dependent claims 10-12 appears in pages 13-15 of the specification as filed.

Based on the above amendments and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn

Examiner Interview of January 13, 2009

Applicant wishes to thank Examiner Rajiv J. Raj for taking the time to conduct a telephonic interview on January 13, 2009 with Applicant's representatives, Ed Yee and Anbar Khal. The rejections presented in the December 16, 2008 Office Action were discussed. During the interview, Applicant's representatives explained the claimed invention and pointed out differences between the invention and the cited references. In particular, Applicant's representatives suggested that the cited references did not disclose or suggest the step of building a database of standard terms, wherein the plurality of terms selected as the standard terms include terms extracted from terms used in existing

medical records, as recited in previously presented claim 1. The Examiner suggested further describing the method used in the building of the database. The preceding claim amendments and the following remarks incorporate many of the suggestions presented by the Examiner and Applicant's representative during the interview. In particular, claim 1 has been amended to affirmatively recite that the step of building the database includes the sub-step of "extracting terms used in existing medical records of patients regarding cardinal symptoms of the patients." Also, new dependent claims 10-12 have been added which are also directed to sub-steps of building the database.

Entry of these amendments and allowance of the present application is respectfully requested.

Rejections under 35 U.S.C. § 112

Claims 5-8 were rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for the language "providing." The Examiner asserts that claims 5-8 did not provide a positive recitation of a step of "providing." Applicant's representatives discussed this rejection with the Examiner during our telephone conference, and explained that these claims recite that the modify function, delete function, add function, and standard statement sentence write function are provided "through the web screen." Accordingly, the claims do recite a step of "providing." After hearing our remarks, the Examiner indicated that he would withdraw this rejection in the next office communication. Applicant therefore respectfully requests the rejection be withdrawn.

Rejections under 35 U.S.C. § 103

Claims 1-8 are rejected under under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,823,948 to Ross Jr. *et al.* ("Ross") in view of U.S. Patent No. 6,047,259 to Campbell *et al.* ("Campbell").

Claim 1 has been amended to recite that the step of building the database of standard terms includes a sub-step of "extracting terms used in existing medical records of patients regarding cardinal symptoms of the patients," and to clarify that the database of standard terms are not patient-specific medical records. Rather, in the storing sub-step of building the database, the standard terms, which include the extracted terms, are stored in the database "so as to be free from association with any particular medical record."

Ross does not disclose a step of extracting terms used in existing medical records, as provided by claim 1. Ross discloses a "prephrased text" module, in which prephrased text examples are stored in file servers to be selected by physicians and nurses for entry into appropriate section of a medical record. See Figure 3 and page 5, lines 60-65 of the Ross patent. Ross is silent with regard to the method for building a database of such prephrased text. Consequently, Ross does not disclose or suggest the step of extracting the prephrased text *from existing medical records of patients*.

Ross also does not disclose a step of storing standard terms, which include the extracted terms, so as to be free from association with any particular medical record. Rather, Ross discloses storing of patient data in a database. See col. 2, lines 59-67 of Ross. Consequently, *patient-specific* medical information is stored in the database, not

standard terms free from association with any particular medical record, as provided by claim 1.

Campbell does not cure the deficiencies of Ross. Campbell does not disclose *building* of a database of standard terms, wherein the step of building the database includes the sub-step of *extracting terms used in existing medical records*. Campbell also does not disclose the sub-step of storing the standard terms (which include the extracted terms) in the database so that the stored terms are *free from association with any particular medical record*.

For at least these reasons, independent claim 1 is patentable over Ross and Campbell. Applicant therefore respectfully requests the rejection be withdrawn.

For at least the foregoing reasons, claim 1 and dependent claim 2 are patentable over the cited references. Applicants therefore respectfully request the rejection of these claims be withdrawn.

New claims 9-12

New claims 9-12 depend from and add features to independent claim 1; therefore, these claims are patentable for at least the same for at least the same reasons as discussed above with respect to claim 1. Further, claim 10 recites that the step extracting terms used in existing medical records includes:

- (a) extracting chief complaints from a computerized discharge summary of medical records;
- (b) normalizing the extracted chief complaints of step (a) by separating the extracted chief complaints of step (a) into main concepts, concept qualifiers, and concept modifiers; and

(c) aligning the main concepts on a spelling and concept basis so as to extract a set of representative chief complaints, the representative chief complaints being the extracted terms.

None of the cited references disclose or suggest the sub-steps (a)-(c) in building the database of standard terms.

Further, claim 11 recites that representative chief complaints obtained through sub-steps (a)-(c) are mapped to standard codes, and claim 12 provides that the mapping step includes imparting, or associating, a concept identifier of a standard code to each representative chief complaint, and classifying each mapped chief complaint based on the extent to which a concept of the representative chief complaint matches the imparted concept identifier of the standard code. See also the specification, at page 14, line 17 to page 15, line 13. None of the cited references disclose or suggest these features of mapping standard codes to the representative terms which were obtained pursuant to the step of extracting terms from existing medical records.

Applicant therefore respectfully requests allowance of claims 9-12.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for

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Suhung-Gwon KIM
Appl. No. 10/564,713

allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Anbar F. Khal
Attorney for Applicant
Registration No. 59,088

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1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600
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